Center Innovation Fund: SSC CIF

Investigation of Environmental Impact Discharge of Elevated Temperature Water into SSC's Canal System

Completed Technology Project (2015 - 2016)

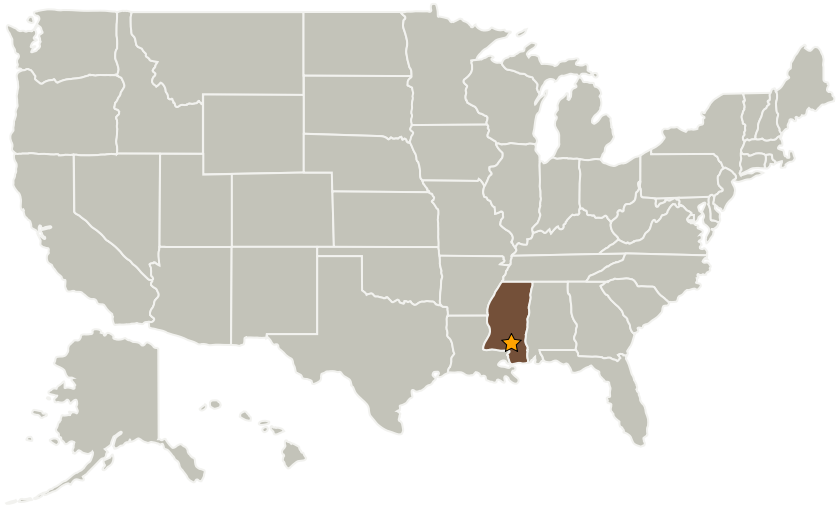
Project Introduction

This effort supports early definition of environmental impacts and identification of unfamiliar requirements for a new propulsion ground testing opportunity at SSC.

Anticipated Benefits

1) Establish steam condenser coolant water temperature discharge limits. 2) Update existing analytic model of SSC's canal system with steam condenser coolant water initial and boundary conditions. 3) Assess water discharge impact on canal water temperature and its distribution. 4) Document analysis and results.

Primary U.S. Work Locations and Key Partners



Organizations Performing Work	Role	Type	Location
★Stennis Space Center(SSC)	Lead Organization	NASA Center	Stennis Space Center, Mississippi

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Primary U.S. Work Locations
Mississippi

Project Website:

https://www.nasa.gov/directorates/spacetech/home/index.html

Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Center / Facility:

Stennis Space Center (SSC)

Responsible Program:

Center Innovation Fund: SSC CIF

Project Management

Program Director:

Michael R Lapointe

Program Manager:

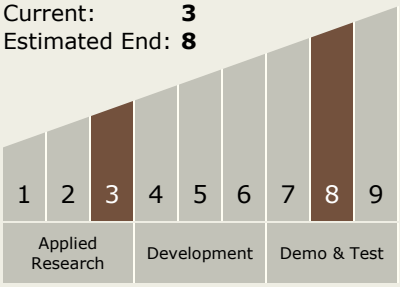
Ramona E Travis

Principal Investigator:

Jody L Woods

Technology Maturity (TRL)

Start: **3**
Current: **3**
Estimated End: **8**



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Technology Areas

Primary:

- TX06 Human Health, Life Support, and Habitation Systems
  - TX06.1 Environmental Control & Life Support Systems (ECLSS) and Habitation Systems
    - TX06.1.2 Water Recovery and Management

Target Destination

Earth